Author's response to reviews

Title: Alertness and visuospatial attention in clinical depression

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Author's response to reviews: see over
Dear Professor Brown,

We herewith kindly ask you to consider the re-revision of our manuscript “Alertness and visuospatial attention in clinical depression” by Schock et al. for publication in BMC Psychiatry.

We would like to thank the reviewers again for their comments and suggestions. We modified our manuscript accordingly. Please find below a point wise reply to the issues raised by the reviewers. Furthermore, we highlighted the respective changes in the revised manuscript.

In the second revision, we further discussed possible reasons for the heterogeneity across the tests and clarified the gain of insight obtained from this variability. Our work was edited again to improve the style of written English.

We are confident that these improvements made the manuscript finally suitable for publication in BMC Psychiatry.

Sincerely yours,

Lisa Schock
Reviewer's report:
The authors have appropriately met all concerns raised in my previous review. The line of argumentation has become clearer and the conclusions drawn are now better comprehensible. Now the authors should re-read the manuscript for little typing and grammatical errors, especially in the newly added sections.

The manuscript was changed accordingly.

Reviewer's report:
A point of weakness of the paper is the lack of consistency across tests. This is mostly the consequence of the results in the subtest TAP-Visual Scanning, which is much less sensitive to reveal left sided neglect/extinction because attention is guided to the left upon each trial (a manipulation in fact aimed at reducing hemineglect/extinction). This is not to deny the value of the sub-test (for example in rehabilitation).
I believe the message may become stronger, without detracting any substantial point in the paper, if the TAP-Visual Scanning condition would be removed altogether. The authors could then be much less defensive and tentative since the results would be more robust across tasks.

We agree with the reviewer that the lack of homogeneity across tests is an issue to deal with in our manuscript. Considering the statistical outcome, the subtest TAP Visual Scanning is not in accordance with the other two visuospatial attention tests. In the revised manuscript, we further discuss this critically (p.12, ll.18-20).

Considering the neuropsychological point of view, however, our results may give additional insight into the subtle visuospatial attention bias in depressive patients. As we further outline in the revised discussion, the result in the subtest TAP Visual Scanning may even stress the relevance of the results in the other two tests by showing that the instruction to direct the attention to the left side diminishes the rightward bias. It is known that neurological patients can overcome visuospatial neglect by using a spatial strategy (Sumio Ishiai, Keiko Seki, Yasumasa Koyama, Yorimichi Izumi: Disappearance of unilateral spatial neglect following a simple instruction; Journal of Neurology, Neurosurgery, and Psychiatry 1997; 63: 23–27). In our opinion, strategy use can explain the result in the subtest Visual Scanning and underlines the functional nature of the visuospatial bias. We further pointed out the influence of cognitive control on the results and complemented the discussion accordingly (p.13, ll.15-19; p.14, ll.13-15; p.20, ll.5-11).

Furthermore, we think that it is more scientifically sound not to perform a post-hoc exclusion of one of the three visuospatial attention tests just as we also tried to be conservative with the correction for multiple testing. For the replication of our work we do not want to withhold the data of the subtest TAP Visual Scanning. According to reviewer 1, we were too confident about our results in the original version of our manuscript. Hence, for the revision, we had qualified our statements accordingly. The central results of our study, however, do not dependent on the exclusion of one of the
tests. Moreover, the description of the methods and results should enable the reader to independently estimate the value of each of the tests.